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EXAMINER

CHOW, CHARLES CHIANG

ART UNIT PAPER NUMBER

2684

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/358,546

Applicant(s)
T. Ozaki et al.

Examiner
Charles Chow

Art Unit
2684



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 22, 1999
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 20) ☐ Other:

Detailed Action

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts (EP 0,079,749 A2) in view of Novogrod (US 6,119,931), and further in view of Albert et al. (US 5,991,410) and Watanabe (US 6,098,055).

Watts discloses **claim 1**, "a portable communication device for communicating with a remote communication terminal, comprising a remote communication interface interfacing radio-frequency communication with a remote communication terminal; a short-distance communication interface interfacing wireless communication with a communication terminal located in the vicinity of the portable communication device; inputting unit inputting data or instruction information to said portable communication terminal", see in title, abstract, front figure, Fig. 1, 2, 8-10, 11-15, 16, col. 2, line 56 to col. 3, line 13, it shows the cellular phone 166 remotely communicates with the remote transceiver 14 or 44, via the interface 52 cellular interface of the 166. In front figure, it shows the 162 infrared IR, short-distance, interface 172 for communication (comm) with 182 for a portable computer 164, in vicinity, having the input means of keypad 178. Besides, in Fig. 7-10, 11-15, col. 18, line 21-54, col. 19, line 3-11, it shows the IR interface 172 has connector 118, in front figure, and the second

proprietary connector 212.

Watts does not explicitly indicate the details for the memory, although showed in the front figure the RAM and microprocessor 58.

Novogrod discloses, a memory storing the data input by the inputting unit or data receiver via the remote interface and said short-distance interface; a display unit displaying the data input by said inputting unit or data received via said remote interface and said short distance interface, see in front figure, abstract, Fig. 1, col. 7, line 37, 48, for the portable, the wireless network 42, to communicate with the remote bank computer 32. It also shows the external device interface 180, the external connector 118, the RF transceiver 172. In col. 15, line 29-35, it shows the optical interface for 180, 118, for short distance interface. In col. 14, line 44-47, it shows the memory stores data received, and outputs data from the memory 174. In the front figure, it shows the display controller 177 and display 140 are utilized for the data displaying means.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Novogrod's memory and display, to Watts, such that the cellular telephone could store the data and display the banking information.

Watts as modified above does not explicitly indicate the enciphering and deciphering clearly. Albert et al. teaches, an enciphering circuit ciphering data to be transmitted to the remote communication terminal via said remote communication interface; an deciphering circuit deciphering data to be received from the remote communication terminal via said remote

communication interface, see in abstract, Fig. 12, item 910 for the encryption, and in Fig. 13, item 930, col. 17, line 12-23, for the decryption of the wireless financial transaction system. Watanabe teaches, the enciphering and deciphering data to be transmitted via said short-distance comm. interface; data received via said short-distance communication of the radio communication information interface, in abstract, Fig. 12A-12C, for a portable terminal 1 communication with the payment IC card utilizing the cryptogram S82, S71, in Fig. 12A-12C, the deciphering S63 in Fig. 12B.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Albert et al.'s encryption, decryption for remote communication terminal for host financial computer, and Watanabe's encryption and deciphering of the local IC card, to Watts as modified above, such that the system could provide security means for protecting the financial information during the local and remote radio communication link. Watts discloses **claim 2**, the voice inputting device and an operational key panel, see in front figure, the microphone 180, and the keypad 178, also, in col. 17, 35-41.

Albert et al. teaches **claim 3**, method used by said enciphering/deciphering processor is changed by changing software installed in said enciphering /deciphering processor, see in col. 15, line 55-61, for the software update download from the frame indicative, and request for authorize a financial transaction.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Albert et al.'s indicative of downloading of updated software, to Watts, such that the transaction authorization could be more efficient by utilizing the

improved software.

Regarding the deciphering and enciphering, referring to the discussion above in claim 1, from Albert et al. and Watanabe.

Regarding **claims 4, 5**, referring to the patent disclosure discussion in claim 1, which also discloses the claimed features in these claims of the computer, radio base station, the stored terminal, the deciphering, enciphering of the money data for payment.

2. Claims 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Zuta (US 5,241,161).

Watts as modified above does not explicitly indicate the stored means

Zuta teaches **claim 6**, wherein said store terminal includes customer information storing means for storing information regarding a customer so that, when the customer make a payment by the digital money...stores information regarding the payment...payment is made, and amount of payment and date and time...said portable comm. device, see in abstract, in front figure, in col. 2, line 51-59, it shows the smart card communicates with the control unit 124 for transmitting, receiving, storing transaction information; the retrieving the previous stored transaction information; the interrogational signal for requesting data to the smart card, utilizing the infrared link

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Zuta's time dependent account information, the previous

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transaction in the memory, the stores information in the memory card, the transmit, receive transaction information from the smart card to the control unit 124, to Watts as modified above, such that the system could stored the transaction information in the local portable memory, smart card, utilizing the infrared link.

Regarding **claim 7**, refer to the infrared short distance smart card memory for previous transaction retrieval, and transmitting to the control unit 124; the storage of the newly received information, as shown in claim 1, 2, as well as the time and date information.

3. Claims 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Zuta, and further in view of Loder (US 5,748,720).

In the above it does not include the details for the displaying of the payment on mobile telephone.

Loder teaches **claim 8**, the displays at least a part of information regarding the payment on the display unit, see in title, in abstract, in Fig. 1-3, it shows the removable Subscriber Identification Module SIM for storing the amount paid before, prepaid, in the SIM, and the controlling of the payment record decrease according to the tariff rate before reaching to the minimum money value in the SIM. In col.3, line 31-39, it shows the payment sent by the network may also be displayed on the mobile equipment.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Loder's displaying of the payment sent by network on mobile

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equipment, to Watts as modified above, such that the mobile user could verify the correctness of the payment, in case of the erroneous payment.

Regarding **claim 9**, an amount of payment or points exceeds a predetermined level, and said store terminal determines whether use of the digital money by said portable communication device satisfies a predetermined requirement..satisfies the predetermined requirement, it has shown above from Loder, the predetermined minimum money value in the SIM.

Regarding the portable device sends a request for service to said store terminal via said short-distances, refer to Zuta above, the interrogational signal sent to smart cart on wrist watch.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Vatanen (US 6,169,890 B1).

Watts as modified above does not explicitly indicate the payment booking.

Vatanen teaches **claim 10**, wherein said portable comm. device sends the information regarding the payment to said computer of the financial institution via said remote comm. interface and said base station, and said computer of said financial institution produces a household account book based on the information regarding the payment sent from said portable comm. device ...the financial institution, see in abstract, front figure, col. 1, line 8-12, it shows the identifying of the user's identity locally for the user's access

rights of utilizing the financial transaction in a mobile telephone system. In col. 5, line 10-20, it discloses the payer confirmed amount after then having approved the transaction, the payment system returns an identification number. The payment terminal utilizing the GSM-network produces to the customer a receipt and records the transaction in the cash register. In col. 5, line 31-35, it discloses the system utilizes the programming intelligence for software booking of the payment records.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Vatanen's recording of the approved transaction record, sending receipt to customer, and the programming intelligence of the software, to Watts as modified above, such that the system could maintain the correct payment records related to remaining balance.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Barabash et al. (US 6,101,378).

Watts as modified above does not explicitly indicate the periodically displaying of the payment.

Barabash et al. teaches **claim 11**, wherein said computer of the financial institution sends data corresponding to the household account book to a communication terminal of a user of said portable comm. device...account book is displayed ...periodically or upon a request by user, see in front figure, for the base station, the mobile unit, 104, the debit processing

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unit DPU 106, for a cellular system for maintaining the balance of the money payment from the mobile unit, otherwise terminating the call request. In col. 2, line 23-27, it shows the DPU can periodically send the balance remaining in the subscriber's account and the mobile can display this balance on its display screen. Also, the display of payment has shown above.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Barabash et al.'s maintaining the user balance, periodically sending and displaying of the balance on mobile unit, to Watts as modified above, such that the most current transaction payment could be access by the mobile user in a periodic manner.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Vatanen and Barahash et al, and further in view of Victor (JP 10,285,657).

Watts as modified above does not explicitly indicate the voice guiding means, although Barabash et al. has shown the base station 102 is connected to the PSTN 110 in Fig. 2.

Victor teaches **claim 12**, voice guiding means for providing a voice guidance to a user of the digital money system, see in basic abstract, for the cellular telephones transmit their position information to the base station. A personal computer 21 transmits the guidance voice stored by the memory to cellular telephones via the base station based on their positional information. The details shows on page 1, 3, 5 of the translation. In page 9, it shows the base

station determines the position of the cellular telephone.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Victor's voice guidance for cellular telephone based on the position information, to Watts as modified above, such that the system be upgraded voice guidance to the blind person, or in the invisible condition, based on the payment position.

Regarding enciphering, deciphering, the portable communicating with base station, the sending of the encryption to portable device, refer to the discussion in claims 1,10, 11 above.

7. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Raith et al. (US 6,073,005).

Watts as modified above does not explicitly indicate the sending user present state.

Raith et al. teaches **claim 13**, wherein said portable com. device sends the information regarding the present state of the user to said service center by said remote comm. means when the information regarding the present state of the user is input by said inputting means, see in abstract, Fig. 2, col. 1, lien 60-65, for a system to handling of the 911 call. the special key on them mobile to initiate an emergency call is provided. Alternative additionally, this special key can serve as a "panic" button which when pressed results in plurality of alarm functions being performed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Raith's special panic function key on mobile unit, to Watts as

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modified above, such that the system could realize user's condition correctly for correctly handling the emergency condition.

Regarding a service provider, a service center including various kinds of service, the base station connected to service center, the input means, the said service center sends message stored to portable device, refer to the discussion for claims 1, 10, 12 above.

Regarding **claim 14**, refer to the discussion in claim 13 above for the specific key for user present state.

Regarding **claim 15**, refer to discussion in claim 12 above, for the determining of the position, and based on the position of the cellular telephone to provide the voice guidance.

8. Claims 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Forslund et al. (US6,250,557 B1).

Watts as modified above does not explicitly indicate the portable comm receives message from service center, the portable comm device sends storing-means's user information.

Forslund et al. teaches **claim 16**, wherein said portable comm device further comprises short-distance comm means for communicating with said service provider terminal and storing means for storing user information, wherein said portable comm device sends the user information stored in said stored means to said service provider terminal when said service device receives a message to the user from said service center, see in front figure, abstract,

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for a mobile telephone 14 communicates with smart card wallet 112 utilizing the short distance infrared IR link, col. 6, line 23-24, col. 4, line 19-20. In abstract, it discloses the data information are transferred to/from the smart cards in the wallet to mobile telephone and via to mediate transaction between the smart cards wallet and parties, banks, merchants. In col. 6, line 34-36, the airline computer request mobile phone to transmit valid transaction information. In col. 10, line 25-28, it shows the mobile phone receives transmitted data from wallet, and transfers first quantity of data to remote transaction unit. Beside, wallet stores the updated encrypted payment transaction information, in col. 6, line 62-65.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Forslund et al.'s mobile phone transmitting of stored updated transaction information in smart card wallet, operating in infrared comm range, to the remote transaction unit, upon requesting from remote transaction unit, to Watts as modified above, such that the payment transactions could be efficiently managed, maintained by the smart card wallet for immediate usage.

Regarding **claim 17**, Forslund et al. above has shown the updating of the payment information in the wallet, and Vatanen has shown the notification of the user with the receipt, the notification could be voice message. The voice guidance system for receiving message to cellular phone has shown above also.

9. Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Raith et al. and Forslund et al., and further in view of Shitara et al. (US 4,833,702).

Watts as modified above does not explicitly indicate the temporary number.

Shitara et al. teaches **claim 18**, wherein said service center further comprises: temporary telephone number setting and announcing means for setting a temporary telephone number...is time limited service, see in abstract, in col. 1, line 19-30, it shows under the roaming condition, the cordless phone is assigned with the temporary telephone number for the current cordless position. If the cordless phone fails to inform the controller of the post-registration within the prescribed time, the registration of this telephone is canceled. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Shitara et al.'s assigning of the roaming temporary telephone number, the cancellation of the telephone registration, within the time interval, to Watts as modified above, such that the assigning of the roaming temporary telephone numbers could be controlled by system. Regarding the voice announcing, referring to claim 17 above. Regarding **claim 19**, referring to the discussion in claim 18 above for the same controller service system utilizing the one roaming temporary telephone number.

Regarding **claim 20**, referring to the discussion from Watts for the second connector 212 for the infrared interface 172 in Fig. 11-15, and the microprocessor, Sir, Uart, in Fig. 7-9 for the interface 172 for controlling of the input, output of the attachment.

Regarding **claim 21**, referring to the discussion in claims 1-3, 12 above, for the attachment, the second connector, the central processing in the attachment, the enciphering/deciphering in the IC card for the attachment.

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Regarding **claim 22**, referring to the discussion in claim 1-3, 12, 20 above for the data/information storing means, the central processing, the data received via second connector, the short-distance transmitting of the data information in the stored means..

10. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Novogrod, and further in view of Albert et al. and Watanabe, and further in view of Grube et al. (US 5,724,655).

Watts as modified above does not explicitly indicate the downloading application program via external connector.

Grube et al. teaches **claim 23**, wherein an application program ...is stored in the...storing means, and the application program can be downloaded from an external terminal via said second eternal connector, see in front figure, in abstract, col. 1, line 54 to col. 2, line 11, col. 29-40, it shows the software updating for the application device 115 to the communication 102. In col. 3, line 32-33, col. 3, line 41-42, for the infrared link associated with signal 117 between the application device 115 and communication unit 102.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Grube et al.'s downloading software from application device to communication unit, to Watts as modified above, such that the software updating could be efficient without burdening the system operator.

Regarding **claim 24**, referring to the discussion in claim 1, 12 for the first, second connector, the central processing unit, the data/information store, the short-distance, the exchanges

signals, the central processing unit transmits control signal to portable, in col .18, line 44-54 by Watts, the transmitting of the stored data via short-distance, the enciphering, deciphering. Regarding **claim 25**, referring to the discussion in claim 23 above, which also provides the claimed features for this claim for the downloading external application program.

Conclusion

11. In view of the above discussion, Novogrod discloses a cellular phone 166 remotely communicates with the remote transceiver 14 or 44, via the interface 52 cellular interface of the 166. It shows the 162 infrared IR, short-distance, interface 172 for communication (comm) with 182 for a portable computer 164, in vicinity, having the input means of keypad 178. Besides, it shows the IR interface 172 has connector 118, and the second proprietary connector 212. Albert et al. discloses the decryption of the wireless financial transaction system. Watanabe a portable terminal 1 communication with the payment IC card utilizing the encryption and the deciphering. Zuta discloses the time dependent account information, the previous transaction in the memory, the stores information in the memory card, the transmit, receive transaction information from the smart card to the control unit 124. Vatanen discloses the recording of the approved transaction record, sending receipt to customer, and the programming intelligence of the software. Barabash et al. discloses the maintaining the user balance, periodically sending and displaying of the balance on mobile unit. Victor discloses the voice guidance for cellular telephone based on the position information. Raith et al. discloses the special panic function key on mobile unit. Forslund et al. discloses the mobile phone transmitting of stored updated transaction information in smart card wallet, operating in infrared comm range. Shitara et al. discloses the assigning of the roaming temporary telephone number, the cancellation of the telephone registration, within the time interval. Grube et al. discloses the downloading software from application device to Communication unit.

12. The cited pertinent prior arts are listed below:

A. US 5,887,249, Schmid discloses the remotely establishing the account service for the cellular radiotelephone, via base station 20A, short messages in claim 2, 7, and the

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storing of the account information in the system, col. 1, line 65-67.

- B. US 6,230,214, Liukkonen et al. discloses the portable mobile device 1 in communication with a PDA utilizing the infrared link, having the attachment second connector 9 for short distance interfacing to the external PDA, as shown in Fig. 1-3, abstract, and summary of the invention.
- C. US 6,078,806, Heinonen et al. disclosed a system for using applications in mobile station for improving the payments, as shown in abstract, Fig. 6, col. 12, 25 to col. 13, claims 13, 16, 17, 21, 26, 28, 32, 36, related to the mobile payment, and decreasing value in the account balance.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Hunter, can be reached at (703)-308-6732.

Any response to this action should be mailed to:

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office

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whose telephone number is (703) 306-0377.

Charles Chow

November/9/2001.


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